CLAIMS:

1.   A method of monitoring the operation of at least one microcontroller unit (300) that is intended for at least one application and is associated with a system (100), characterized in that

          - the microcontroller unit (300) has at least one monitoring module (10) associated with it, and in that

          - the fact that a reset of the microcontroller unit (300) has taken place is acknowledged to the monitoring module (10) by means of at least one confirming signal.

2.   A method as claimed in claim 1, characterized in that the confirming signal

          - is formed by at least one trigger signal or trigger code that differs from the normal operation of the microcontroller unit (300) and/or

          - is permitted only once by the monitoring module (10).

3.   A method as claimed in claim 1 or 2, characterized in that,

          - in relation to the operation of the microcontroller unit (300), a distinction is made between different reset events and in that

          - these different reset events are acknowledged to the monitoring module (10) by means of different confirming signals.

4.   A base chip (200), and particularly a system base chip, for monitoring the operation of at least one microcontroller unit (300) that is intended for at least one application, characterized by

          - at least one reset unit (40) connected (42) to the microcontroller unit (300), for resetting the microcontroller unit (300), and

          - at least one monitoring module (10) that is associated with the microcontroller unit (300) and to which the fact that a reset of the microcontroller unit (300) has taken place can be acknowledged by means of at least one confirming signal.

5.   A base chip as claimed in claim 4, characterized by

- at least one information unit (20) that is provided to allow for different reset events, and

- at least one supply unit (50) that is connected (52) to the microcontroller unit (300).

6.   A base chip as claimed in claim 4 or 5, characterized in that

- the monitoring module (10) can be triggered by means of at least one interface unit (30) and/or in that,

- to distinguish between the individual accesses to the monitoring module (10), different reset events can be marked by different trigger values.

7.   A base chip as claimed in any of claims 4 to 6, characterized in that the base chip (200) goes to a fail-safe mode

- if the resetting of the microcontroller unit (300) is not acknowledged once by means of the confirming signal and/or

- if the base chip (200) receives the confirming signal without a reset having taken place previously,

there being, in the fail-safe mode, in particular a current consumption that is lower than in normal operation.

8.   A base chip as claimed in any of claims 4 to 7, characterized in that there is provided between the monitoring module (10) and the microcontroller unit (300) at least one signal line (32) for transmitting the confirming signal, and in particular the trigger signal or trigger code that differs from the normal operation of the microcontroller unit (300).

9.   A system (100), and particularly a control system, characterized by at least one microcontroller unit (300) intended for at least one application and by at least one base chip (200) as claimed in any of claims 4 to 8.

10.   Use of a method as claimed in any of claims 1 to 3 and/or of at least one base chip (200) as claimed in any of claims 4 to 8 for monitoring the operation of at least one microcontroller unit (300) intended for at least one application, in automobile electronics and in particular in the electronics of motor vehicles.